

## REMARKS

Applicants invention is directed to articles of manufacture comprising a core material and a surface material, wherein the core material is a wood composite and the surface material is a high pressure laminate. In accordance with the invention the wood composite is bonded to the high pressure laminate with a foamed polyvinyl acetate emulsion-based adhesive. Articles of manufacture encompassed by the invention include countertops, architectural panels, flipper doors and the like.

Claims 12-18, 21 and 22 are rejected under 35 U.S.C. § 103 as being obvious over Murphy et al. (U.S. Patent No. 4,036,673).

Murphy discloses use of an adhesive composition comprising water, filler, resinous adhesive, plasticizer and tackifier (see, e.g., col. 6, lines 50-52). Murphy describes a method of for installing a surface covering material on a surface such as a floor surface or a wall surface, using an adhesive that will conform to irregularities common on such surfaces.

While polyvinyl acetate is included in the list of suitable resins, vinyl acrylic copolymers are preferred adhesive agents (col. 2, lines 56-58, col. 6, lines 62-62). Vinyl acetate butyl acrylate copolymer is disclosed as being particularly preferred (col. 3, lines 60-62), and this is the resin used in all exemplified formulations (Examples 1-4). The adhesive is foamed and used to attach a floor surface covering material to a floor. The adhesive is foamed and applied in the foamed state in the field by the installer of the surface material.

Murphy discloses (col. 3, lines 8-14):

The method of the present invention may be used in installing sheet goods such as large widths or tiles of floor covering of vinyl, vinyl-

asbestos, vinyl-foamed vinyl-asbestos, cellulose backed vinyl, jute or foam backed carpeting and the like; wall coverings such as fabric-backed polyvinyl halide, polyvinyl halide coated paper, and the like.

There is no disclosure or suggestion in the Murphy patent that wood composites may be bonded to high pressure laminates using a foamed polyvinyl acetate based adhesive.

Murphy (col. 1, lines 18-26) merely discloses that:

The prior art has suggested many methods for installing a surface covering material on a surface such as a floor surface, wall surface, counter top, ceiling, upholstery substrates or the like.

Murphy goes on to disclose (col. 1, lines 18-23):

Many types of adhesives or adhesive products have been used, but the type of adhesive used depends to a large extent upon the use to which the surface covering will be subjected, as well as the nature of the surface covering material and the surface being covered.

Murphy only teaches adhesives and methods for bonding particular surface covering materials to specific flooring surfaces. Murphy does not teach countertops or any other article wherein a wood composite material is bonded to a high pressure laminate using a foamed adhesive comprising polyvinyl acetate.

It is well known that in order to establish a *prima facie* case of obviousness; three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference(s) or in the knowledge generally available to one of ordinary skill in the art, for the modification. Second, there must be a reasonable expectation of success. Third, the prior art reference must teach or suggest all the claimed limitations. In addition, the teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, not in applicants' disclosure. See, *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991) and MPEP 214.

The examiner has failed to meet these requirements. There is no disclosure in Murphy that would lead the skilled artisan to the claimed invention let alone provide any indication that such could be successfully accomplished. Murphy fails to suggest and does not provide any motivation to use foamed adhesive as claimed by applicants to bond a wood composite core material to a high pressure laminate. Murphy's enabling disclosure and claims are directed to applying a surface covering to a floor surface. Murphy fails to provide teachings suggestive of a reasonable expectation of success. Murphy fails to teach or suggest all the claimed limitations.

The examiner refers to, but does not apply, U.S. Patent 3,891,788 (Karszes). The examiner urges that this patent evidences the state of the known art that polyvinyl acetate is a suitable adhesive for bonding high pressure laminates to a substrate such as plywood, particle board, chipboard, etc. to make countertops, flooring, etc. The examiner urges that it would have been obvious to the skilled artisan to make a countertop by bonding a high pressure laminate to a substrate such as particle board using a foamed adhesive as taught by Murphy.


Applicants respectfully disagree.

Referring again to col. 1, lines 18-23, Murphy acknowledges that the end use application and materials to be bonded together will dictate what type of adhesive to be used. Karszes merely discloses end use applications of various high pressure laminates bonded to a backer material such as particle board. While contact cements are described as preferred for bonding components together, Karszes discloses that other cheaper adhesives can be used if the laminates are first roughened up by sanding. While Karszes discloses examples of cheaper adhesives (urea formaldehyde adhesives, white glues such

as polyvinyl acetate, polyacrylic and polyethylene materials and copolymers thereof, phenolic or resorcinol formaldehyde adhesives and adhesives prepared from epoxy and other resins, asphalts, coal tars and animals glues), there is no acknowledgement that a polyvinyl acetate emulsion is recognized in the art for bonding such materials and nothing is indicated that is known and accepted in the art.

Applicants urge that the examiner has failed to establish a *prima facie* case of obviousness. Murphy does not suggest or provide any motivation to use a foamed polyvinyl acetate based adhesives, to bond a wood composite to a high pressure laminate. Reversal of the examiner's Section 103 rejection is requested. Should the examiner continue to rely on the Karszes disclosure, it is requested that the examiner make this document of record by listing it on a form PTO-892 and setting forth a formal rejection based on this document.

Respectfully submitted,

  
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